



U.S. Department
of Transportation

**Federal Highway
Administration**

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION:** LTPP Directive FWD-29,
Updated FWD Guidelines and Software

Date: April 1, 2005

From: Eric Weaver 
Long Term Pavement Performance Team

Reply to
Attn of: HRDI-13

To: Dr. Frank Meyer, PM - LTPP North Atlantic Regional Contract
Dr. Frank Meyer, PM - LTPP North Central Regional Contract
Mr. Mark Gardner, PM - LTPP Southern Regional Contract
Mr. Kevin Senn, PM - LTPP Western Regional Contract

Attached is the Long Term Pavement Performance (LTPP) Program Monitoring Directive FWD-29: Updated FWD Guidelines and Software. These instructions supersede those contained in previous updates of the LTPP FWD Guidelines and Software. Please ensure that all personnel involved with the IMS and FWD data collection are aware of this new directive.

Should you have any questions or would like to discuss this directive, please do not hesitate to contact me at 202-493-3153.

Attachment

LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program



Program Area:	Monitoring	Directive Number:	FWD-29
Date:	April 1, 2005	Supersedes:	FWD-20, FWD-22, FWD-23, FWD-24, FWD-25, FWD-27, FWD-28
Subject:	Updated FWD Guidelines and Software		

Effective immediately, the following guidelines and software are to be used for all deflection testing and data processing activities:

- LTPP Manual For Falling Weight Deflectometer Measurements Version 4.0
- LTPP FWD Data Collection Software Manual Version 1.0
- LTPP Modifications to Dynatest FWDWin Software Version 1.0
- FWDScan Version 4.0 Users Manual
- FWDScan Version 4.0 Software Distribution
- FWDConvert Version 1.0 Users Manual
- FWDConvert Version 1.0 Software Distribution

After installing the listed software on the FWD data collection computer and prior to the first use of FWDWin for LTPP data collection, the RSCs must perform the following activities:

- Check that the load cell and geophone serial numbers listed in the FWDWin software match the transducers on the FWD
- Check that the calibration factors for the load cell are consistent with the most recent reference calibration
- Check that the calibration factors for the geophones are consistent with the most recent relative calibration
- Perform a new relative calibration
- Perform a new DMI calibration
- Perform the verification procedure for all FWD mounted temperature sensors and associated hand-held temperature sensors

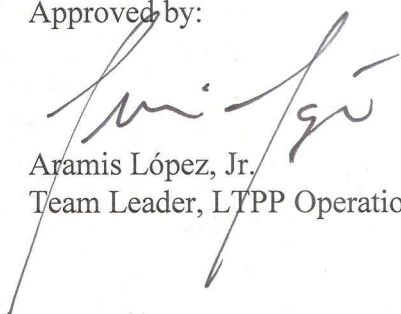
- Check that the geophone locations listed in the FWDWin software match the requirements in Section 4.1.1 of the LTPP Manual for FWD Measurements Version 4.0.
- Check that the actual geophone locations on the FWD match the requirements in Section 4.1.1 of the LTPP Manual for FWD Measurements Version 4.0, using the method provided in that section

Please send the copies of forms F07, F08 and F09 and the FWDCAL 'CS5' files resulting from these activities to the FHWA LTPP FWD Task Leader, with copy to the TSSC.

Questions concerning this directive should be addressed to the FHWA LTPP FWD Task Leader.

Prepared by: TSSC

Approved by:



Aramis López, Jr.
Team Leader, LTPP Operations